AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims, in the application:

LISTING OF CLAIMS:

1.   (Currently Amended) A storage medium storing a set of program instructions executable on a data processing device and usable to optimize a bidding process for resources, the set of program instructions A multi-agent caching system for optimizing a bidding process for resources, comprising:

instructions for creating a bid manager agent for issuing a call for bids for usage of said resources, receiving said bids and selecting a best bid from among said bids, wherein each of said bids defines a predetermined context;

instructions for creating a plurality of bidder agents for issuing said bids according to predetermined bidding policies in response to said call for bids, wherein one of said bidder agents issues said best bid and provides said resources upon selection of said best bid by said bid manager agent; and

instructions for creating a plurality of resource_adapters for providing a uniform interface to access application program interfaces of said resources, one of said resource adapters being a caching adapter for maintaining cached bids for predetermined contexts from predetermined ones of said bidder agents, and for receiving from said bid manager agent said call for bids and issuing said cached bids to said bid manager agent instead of requiring said predetermined bidder agents to issue said bids, and a no-caching adapter for receiving from said bid manager agent said call for bids, re-issuing said call for bids to ones of said bidder agents other than said predetermined bidder gents, receiving said bids from said ones of said bidder agents other than said predetermined bidder agents and sending said bids to said bid manager agent.

2.   (Currently Amended)   The multi-agent caching systemstorage medium of claim 1, wherein said program instructions further comprise instructions for caching adapter updatings said cached bids in response to new contexts of said bids.

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3. (Currently Amended) The ~~multi-agent caching system~~ storage medium of claim 1, wherein said program instructions further comprise instructions for ~~said bid manager~~ select_ing_ said best bid by sorting said resource adapters according to decreasing values of said bids and selecting a first available one of said bidder agents according to said resource adapters as sorted.

4. (Currently Amended) The ~~multi-agent caching system~~ storage medium of claim 1, wherein each said context is defined by a discrete parameter value.

5. (Currently Amended) The ~~multi-agent caching system~~ storage medium of claim 1, wherein said program instructions further comprise instructions for ~~each said bidder agent~~ send_ing_ a notification message to said bid manager agent in the event of any changes to its bidding policies, in response to which said bid manager agent updates said caching adapter.

6. (Currently Amended) The ~~multi-agent caching system~~ storage medium of claim 5, wherein said program instructions further comprise instructions for ~~said bidding policies are~~ stor_ing_ ~~ed~~ said bidding policies via said caching adapter as entries in a table and ~~said bid manager agent~~ updat_ing_ ~~es~~ individual ones of said cached bids to reflect said changes in said bidding policies.

7. (Currently Amended) The ~~multi-agent caching system~~ storage medium of claim 5, wherein said program instructions further comprise instructions for ~~said bidding policies~~ are stor_ing_ ~~ed~~ said bidding policies via said caching adapter as general rules and ~~said bid manager agent~~ clear_ing_ ~~s~~ all of said cached bids.

8. (Currently Amended) An optimized method of acquiring bids from a plurality of bidder agents for resources, comprising the steps of:

issuing a request from a bid manager agent for bids for usage of said resources, wherein each of said bids defines a predetermined context;

accessing a cache of stored bids and related contexts to determine whether said cache contains bids defining said predetermined context;

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issuing a call for bids to said bidder agents in connection with which no bids defining said predetermined context are stored in said cache, in response to which said bidder agents return bids to said bid manager <u>agent</u> and said bids are stored in said cache along with said predetermined context; and

retrieving from said cache said bids defining said predetermined context previously stored by said bidder agents.

9. (Original) The optimized method of claim 8, further comprising the step of updating said stored bids in response to new contexts of said bids.

10. (Previously Presented) The optimized method of claim 8, further comprising the step of selecting a best bid by sorting said bids according to decreasing values of said bids and selecting a first available one of said bidder agents according to said sorting.

11. (Original) The optimized method of claim 8, wherein each said context is defined by a discrete parameter value.

12. (Currently Amended) The optimized method of claim 8, further comprising the step of sending a notification message to said bid manager <u>agent</u> in the event of any changes to its bidding policies, in response to which said bid manager <u>agent</u> updates said cache.

13. (Original) The optimized method of claim 12, further comprising the step of storing said bidding policies as entries in a table.

14. (Original) The optimized method of claim 13, further comprising the step of updating individual ones of said cached bids for updating said cache to reflect said changes in said bidding policies.

15. (Original) The optimized method of claim 12, further comprising the step of storing said bidding policies as general rules.

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16.   (Original)   The optimized method of claim 15, further comprising the step of clearing all of said cached bids for updating said cache to reflect said changes in said bidding policies.

17.   (Currently Amended)   An apparatus for optimizing a bidding process for resources, the apparatus comprising:

a bid manager agent comprising means for issuing a call to bidder agents for bids for usage of said resources, means for receiving said bids and means for selecting a best bid from among said bids, wherein each of said bids defines a predetermined context;

a plurality of resource adapters for providing a uniform interface to access application program interfaces of said resources, one of said resource adapters being a caching adapter comprising means for maintaining cached bids for predetermined contexts from predetermined ones of said bidder agents, receiving from said bid manager agent said call for bids and issuing said cached bids to said bid manager agent instead of requiring said predetermined bidder agents to issue said bids, and a no-caching adapter comprising means for receiving from said bid manager agent said call for bids, re-issuing said call for bids to ones of said bidder agents other than said predetermined bidder agents, receiving said bids from said ones of said bidder agents other than said predetermined bidder agents and sending said bids to said bid manager agent.